AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for determining a mimotope sequence for a receptor comprising the steps of:

a) providing a solid support with a random library of test sequences composed of building blocks [[chosen]] selected from the group consisting of amino acids, monosaccharides, and nucleotides;

b) contacting the library with the receptor;

[[b)]] c) determining the activity ~~of~~ for each test sequence of the library towards the receptor;

[[c)]] d) identifying a test sequence comprising at a certain position a building block which, according to the results of step [[b)]] c), is favored at said position;

[[d)]] e) providing a [[next]] second library of test sequences, based on said test sequence identified in step [[e)]] d), by replacing a building block at selected positions of the identified test sequence with selected building blocks;

f) contacting said second library with the receptor;

[[e)]] g) determining the activity of each test sequence of the library provided in step [[d)]] e) towards the receptor;

[[f)]] h) identifying a test sequence comprising at a certain position a building block which, according to the results of step [[e)]] g), is favored at said position; and

[[g)]] i) repeating steps [[d) - f)]] e) - h) for the library of test sequences provided in step [[d)]] e), for a number of cycles sufficient for finding in step [[f)]] h) a mimotope sequence that gives sufficient activity towards the receptor; wherein each test sequence is located on a minicard ~~or flat support medium~~.

2. (cancelled).

3. (currently amended): [[A]] The method according to claim 1, wherein in step [[e)]] g) an amount of receptor ~~f)~~ is used for determining the activity, ~~which~~ wherein said amount is smaller than said amount used in step [[b)]] c), and wherein said amount in step [[g)]] i) is smaller than said amount in step [[e)]] g) of the cycle directly preceding said step [[g)]] i).

4. (currently amended): [[A]] The method according to claim 3, wherein in step [[e)]] g) the amount of receptor used for determining the activity is ~~smaller by a factor in the range of~~ from 5 to 1000 fold smaller than said amount used in step [[b)]] c), and wherein said amount in step [[g)]] i) is ~~smaller by a factor in the range of~~ from 5 to 1000 fold smaller than said amount in step [[e)]] g) of the cycle directly preceding said step [[g]] i).

5. (currently amended): [[A]] The method according to claim 4, wherein in step [[e)]] g) the amount of receptor used for determining the activity is ~~smaller by a factor in the range of~~ from 10 to 100 fold smaller than said amount used in step [[b)]] c), and wherein said amount in step [[g)]] i) is ~~smaller by a factor in the range of~~ from 10 to 100 fold smaller than said amount in step [[e)]] g) of the cycle directly preceding said step [[g)]] i).

6. (currently amended): [[A]] The method according to claim 1, comprising at least one step [[d)]] e) wherein at least one building block is replaced by a group of building blocks.

7. (currently amended): [[A]] The method according to claim 1, wherein the test sequences provided in step a) comprise from 3 to 20 building blocks.

8. (currently amended): [[A]] The method according to claim 1, wherein the library of test sequences of step a) comprises from 500 to 10,000 test sequences.

9. (currently amended): [[A]] The method according to claim 1, wherein the receptor is chosen from the group consisting of monoclonal antibodies, proteins[[, such as]] enzymes, cells, hormone receptors, and micro-organisms.

10. (currently amended): [[A]] The method according to claim 1, wherein the activity is determined using an immuno

assay, ~~BIACORE~~ a research system for label-free studies of biomolecular binding or [[AFM]] Atomic Force Microscope.

11. (currently amended): [[A]] The method according to claim 1, wherein each test sequence of a library is physically separated from the other test sequences of said library.

12. (currently amended): A mimotope sequence ~~obtainable in a~~ obtained by the method according to claim 1.

13. (new): A method for determining a mimotope sequence for a receptor comprising the steps of:

a) providing a solid support with a random library of test sequences composed of building blocks selected from the group consisting of amino acids, monosaccharides, and nucleotides;

b) contacting the library with the receptor;

c) determining the activity of each test sequence of the library towards the receptor;

d) identifying a specific building block of a test sequence that exhibits a higher activity in step c than other test sequences;

e) providing a second library of test sequences, based on said test sequence identified in step d, and replacing a building block at selected positions of the identified test sequence with selected building blocks;

f) contacting the second library with the receptor;

g) determining the activity of each test sequence of the library provided in step e) towards the receptor;

h) identifying a building block of a test sequence that exhibits a higher activity in step e than other test sequences; and

i) repeating steps e) - h) for the library of test sequences provided in step e), for a number of cycles sufficient for finding in step h) a mimotope sequence that gives sufficient activity towards the receptor; wherein each test sequence is located on a minicard.

14. (new): The method according to claim 13, wherein in step g) an amount of receptor is used for determining the activity, wherein said amount is smaller than said amount used in step c), and wherein said amount in step i) is smaller than said amount in step g) of the cycle directly preceding said step i).

15. (new): The method according to claim 14, wherein in step g) the amount of receptor used for determining the activity is from 5 to 1000 fold smaller than said amount used in step c), and wherein said amount in step i) is from 5 to 1000 fold smaller than said amount in step g) of the cycle directly preceding said step i).